

CLAIMS

1. A method of creating a reamed hole below the surface, the method comprising the steps of:
Positioning a directional drilling machine on the surface, the directional drilling machine having at least one boring stem;
connection of a reaming device using a dual reaming mechanism, such mechanism being driven by either a plurality of boring stems, with at least one stem concentrically located inside of another or a single stem that uses mechanical means to differentiate torque. The interior section of the dual reaming mechanism having the capability of being rotated at a slower or faster revolution rate than the exterior section of the apparatus;
use of the dual reaming tool to form a substantially round reamed hole that is larger than the drill string;
2. The method of claim one where the dual reaming tool is used to form a substantially non round or irregularly shaped reamed hole larger than the drill.
3. An apparatus consisting of:
A rearward and forward end. The forward end capable of being connected to a directional boring machine as known in the art. Said apparatus having at least two parts, an interior portion and an exterior portion. Said interior portion that can be turned independently of said exterior portion.
4. **The claim of apparatus of claim 3 wherein the interior portion is connected by the use of a threaded connection. The exterior portion is connected by the use of a threaded connection.**
5. The method of claim 1 where the interior portion of the dual reaming apparatus is rotated in a clockwise rotation and the exterior portion of the reaming apparatus is rotated in a counterclockwise rotation.
6. The method of claim 1 where the interior portion of the dual reaming apparatus is rotated in a counterclockwise rotation and the exterior portion of the reaming apparatus is rotated in a clockwise rotation.

7. The method of claim 1 where the interior portion is rotated in a clockwise or counterclockwise position and the exterior portion is rotated in a clockwise or counterclockwise position.
8. The apparatus of claim 3 where there is at least one stabilizing wing located on the exterior portion.
9. The method of claim 1 where the interior portion is rotated at a different rate than the exterior portion by use of either a combination of at least two gears or a camshaft. Said gears or camshaft used to differentiate torque provided by rotation of a connected directional boring machine drill string.

10. A method of creating a reamed hole below the surface, the method comprising the steps of:-

positioning a directional drilling machine on the surface, the direction drilling machine having at least one boring stem; and

connecting a reaming device to the at least one boring stem wherein the reaming device has a dual reaming mechanism with an interior section and an exterior section wherein the interior section is rotatable independently of the exterior section.

11. A method according to claim 10, wherein the dual reaming mechanism is connected to a plurality of boring stems with at least one stem concentrically located within another.

12. A method according to claim 10, wherein the dual reaming mechanism is connected to a single boring stem and a mechanical means is provided to produce differential torque.

13. Use of the method of any of claims 10 to 12 to produce a substantially circular reamed hole.

14. Use of the method of any of claims 10 to 12 to produce a substantially non-circular reamed hole.

15. An apparatus for creating a reamed hole below the surface, the apparatus comprising:-

a reaming device arranged to be connected to one or more boring stems, the reaming device having an interior section and an exterior section which are rotatable independently of each other.

16. An apparatus according to claim 15, wherein the interior section and exterior section are both rotatable about the same axis.

17. An apparatus according to claim 15, wherein the exterior section is arranged to substantially not rotate during the creation of a reamed hole.

18. An apparatus according to claim 17, wherein the exterior section is provided with at least one outside stabilising wing to reduce rotation.

19. An apparatus according to claim 17 or claim 18, where the exterior section has a non-circular cross-section.

20. An apparatus according to claim 15 or claim 16, wherein the exterior section has a substantially circular cross-section.